

## PATENT ABSTRACTS OF JAPAN

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(71)Applicant : MITSUBISHI CHEMICALS CORP

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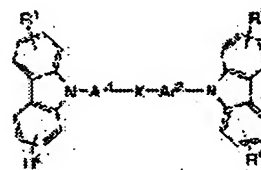
(72)Inventor : SATO YOSHIHARU  
OGATA TOMOYUKI  
ICHINOSAWA AKIKO

## (54) ORGANIC ELECTROLUMINESCENCE ELEMENT

## (57)Abstract:

PROBLEM TO BE SOLVED: To provide high heat resistance and to provide a stable blue light emission excellent in color purity by including a diamine compound having a substituent in a light emitting layer.

SOLUTION: A compound expressed by formula I is included in a light emitting layer of an organic EL element. In formula I, Ar1 and Ar2 are each an aromatic hydrocarbon ring radical and an aromatic heterocyclic group; and R1 to R4 are each a hydrogen atom, halogen atom, alkyl group, aralkyl group, alkenyl group, allyl group, cyano group, amino group, acryl group, alkoxy carbonyl group, carboxyl group, hydroxyl group, amide group, aryloxy group, aromatic hydrocarbon ring radical and aromatic heterocyclic group. X is a bivalent connecting group, and is selected from a direct bond or a connecting group expressed by formula II, formula III, formula IV and formula V. Ar3 in the formula V is expressed by formula VI. R5 to R8 in formula VI are either of groups of R1 to R4 in formula I. A film thickness of a light emitting layer is normally 10 to 200 nm, and is desirably 30 to 100 nm.



I



II



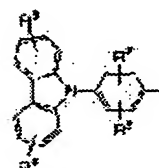
III



IV



V



VI

## LEGAL STATUS

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